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Cinematographer

THE MAGAZINE OF MOTION PICTURE PHOTOGRAPHERS



THIS ISSUE: • Montage in Amateur Movies
• Cinerama—Super Movies Of Tomorrow
• "Senc" Sound on Quarter-Inch Magnetic Tape

**JANUARY
1951**



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ON THE COVER

DIRECTOR of photography James Wong Howe, A.S.C. — in dark polo shirt, lower left — has set up his camera on a parallel in middle of pool of Long Beach (Calif.) Municipal Flange for an important scene in *Roberts' "Frontiers"*. He has *"All The Way"*, starring John Garfield and Betty Hutton. As camera starts to roll, director John Berry explains scene to Garfield. For similar scene in pool, cameraman Howe dressed women trunk, shot underwater with a hand camera in a plastic bag — *Photo by Hal McElroy*

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AMERICAN SOCIETY OF CINEMATOGRAPHERS

FOUNDED January 8, 1918, The American Society of Cinematographers is composed of the leading directors of photography in the Hollywood motion picture studios. Its membership also includes non-studio cinematographers and cinematographers in foreign lands. Membership is by invitation only.

The Society meets regularly once a month at its clubhouse at 1918 North Orange Drive, in the heart of Hollywood. On November 1, 1949, the Society published its monthly publication "American Cinematographer" which it continues to sponsor and which is now distributed in its countries throughout the world.

Dominant aims of the Society are to bring into close confederation and cooperation all leaders in the cinematographic art and endeavor to strive for pre-eminence in artistic perfection and scientific knowledge of the art.

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85% of the motion pictures shown in theatres throughout the world are filmed with a Mitchell

Hollywood Bulletin Board



HARRY STEADLING, A. S. C., whose photography of Samuel Goldwyn's "Sole of Shoe" has won for him the American Society of Cinematographers' Picture Of The Month award for October. "Sole of Shoe" is Steadling's first picture for Goldwyn who early last year signed him for his exclusive services. He replaced the late George Foland Steadling moved to Goldwyn's from MGM where he had been one of that studio's top directors of photography since 1941.

Nomination ballots for voting on 1950 Academy Awards will be mailed January 18, with January 27th the date set by the Academy for closing the nomination polls. The awards nominations in all categories will be announced in the press February 11. Nominations in the Cinematography Division will be announced in the March issue of *American Cinematographer*. Screening of nominated pictures will be held from February 18 through March 21 at the Academy Award Theatre in Hollywood. Final award ballots will be mailed to all eligible Academy members February 27, with the polls closing March 21. The 23rd annual presentation of Oscars will be held March 22 at the Hollywood Pantages Theatre.

Cinematographer Robert Warr was among the forty-three new members admitted to the Academy of Motion Picture Arts and Sciences last month. Group was last to be admitted into the Academy ranks until the next regularly scheduled board of governors meeting to be held in April.

John Boyle, A.S.C., was sent to Folsom prison last month—by Warner Brothers, to direct second unit photography for

studio's "The Story of Folsom." A grim chore, he reports.

Lee Toror, A.S.C., director of photography for Twentieth Century-Fox, had his contract renewed for another year in that studio.

Director George Sidney's hobby of making Rollie shorts throughout the production of his films at MGM has attracted the Hemmings Press publishing house, which has announced acquisition for March publication of "Lens-Eye Views," comprising 300 of director's candid shots with text consisting of Sidney's personal notes on each picture.

J. Rags Contner, A. S. C., New York cinematographer, journeyed to Hollywood last month to photograph material for television spot announcements for the Billy Rose television show, sponsored by Hudson Motor Company and produced by Sierra, Inc. Program is relayed over our coast TV networks every Sunday evening.

Ted Phillips, photographer for Burton Holmes, has completed an assignment in Australia for the lecturer and embarked for New Zealand to film a new lecture subject there.

Votescaps, a new motion picture production technique of European origin, and said to utilize photography as sets against which live-action is staged, has been acquired for use in the U. S. by Sol Lesser. Facilities of new method have been offered the Government by Lesser for the stepped up production of training films.

Benjamin Klum, A. S. C., who has been directing the photography on the Bag Coubie Enterprises, series of television films at Hal Roach Studios, was presented with an Award of Merit last month by the video trade publication "TV" for having photographed the greatest number of television films in 1950—one hundred and twenty-five.

Shop demand for cinematographers was made known by the Army Air Force in long distance talks with Hollywood last

month. Accelerated war preparation is said to be opening up opportunities for both commissioned and non-commissioned men, and especially for those who served Government in like capacity in last war.

Albert S. Howell, inventor and founder and board chairman of the Bell & Howell Company, died January 3rd at the age of 71. He retired from active duty with B&H company in 1940 but maintained his association with the company to carry on a specialized engineering project.

In 1949 he was elected chairman of the board of the company.

Mr. Howell was an Honorary Member of the American Society of Cinematographers. His work on early day motion picture equipment led to the standardization of the industry's product on 35mm film. He is credited with taking the flicker out of motion pictures and being among the first to advance ideas in the motion picture medium for amateurs.

Rudolph Mate, A.S.C., former cinematographer who later became one of the industry's ace directors ("Union Square") was a recent directorial share of his, will function as producer in addition to directing the tentatively titled Benjamins Production, "The White Road," which starts shooting April 1 in France.

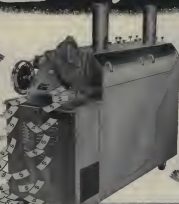
Mate currently is directing "When Worlds Collide" at Paramount Studios. This is George Pal's follow-up production of his successful "Destination Moon."



PETER HOLT, A. S. C. (left), president of the Male-Edinburgh Company, assumes presidency of the Society of Motion Picture and Television Engineers on January 1st. National president Earl Sponable is shown, new organization's Male-Edinburgh has election last October at the Society's 88th Semi-Annual convention held at Lake Placid, N. Y.



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Keeping up with PHOTOGRAPHY

ABILITY OF COLOR FILM to record fine detail is determined by the effects which occur at the moment of exposure, according to Karl H. Schädlich, Anso research scientist. The relative importance of the various effects is somewhat different than those encountered with conventional black-and-white film. In Anso Color film, the layer construction and physical characteristics of the required emulsions create the major influence upon resolving power. Because the emulsions are highly transparent, halation becomes a major factor. The emulsion turbidity is low and has less effect. Grain size is not a significant factor, but the density and color differentials of the original subjects are particularly important, Schädlich said.

PROBLEMS OF PHOTOGRAPHY in tropical areas where temperatures and relative humidity are high are being explored at the Patana laboratory of Eastman Kodak Company. Here research activity falls into two general categories: one is the investigation of the deterioration of films, plates and papers, camera lenses and similar photographic equipment. The aim here is to find means for preventing deterioration from the various tropical factors. The other main activity consists of research on photographic practice in the tropics, including the study of processing problems darkroom and studio operations etc.

CIVIL AERONAUTICS Administration authorities, faced with the problem of accurately measuring the takeoff and landing runs of aircraft under varying conditions, for later use by aircraft and airport engineers, have developed four highly specialized cameras for use as studying operational characteristics of aircraft and obstacles to safe landings.

They are, the Aircraft Takeoff and Landing Camera, the Transit Camera For Approach Zone Study, the Automatic Flight Data Camera, and the Cockpit Visibility Camera. All four cameras are illustrated and described in a recent issue of *Photographer Engineering*, a new magazine devoted to the science, and the official publication of the Society of Photographer Engineers.

The special cameras designed for recording takeoff and landing runs of aircraft photographs the plane on the runway, and on the same film includes all

essential data, such as wind direction and velocity, lapid time and all other information relevant to the site or ship.

This camera reportedly is a hybrid between a true motion picture camera and a still camera taking fast sequence pictures. To photograph data revealed by plane instruments in flight, the CAA sponsored development of a camera that mounts back of the pilot. Using infrared discharge lamps for interval illumination, rapid-sequence pictures are filmed without distracting the pilot.

Perhaps the most interesting concern in the group is that designed to study the range of vision possible from the cockpit of aircraft, particularly transport planes which encounter unusual hazards in operating into congested airfields. This camera is located at the pilot's eye-level, has an extreme wide-angle lens and incorporates a recording grid representing the angular values.

A HANDY IMPROVED motion picture film intended for picture taking at depths of more than three miles beneath the surface of the earth and at temperatures up to 113 degrees above the boiling point of water is now being produced for oil well drillers, the Eastman Kodak Company has announced.

This film, which is available in both 16mm and 35mm widths, is called Kodak Lithograph Drift Survey Film. Used in a standard diameter or drift survey camera, the film is employed in well drilling operations to record instrument readings as drift meters, and other devices are lowered into the well to determine the angle and direction that drilling operations are taking.

The film, according to Kodak research technicians, has to be able to take the more than ordinary pushover from heat. This is because of the increasingly higher temperatures encountered as drift survey meters and other apparatus are lowered to even greater depths in well drilling operations. The improved film can be successfully used at depths down to 15,000 feet and temperatures up to 325°F.

From the photographic record made on the new film, technicians can quickly determine the angle and direction that a hole is "off vertical" at any specified depth, or, chart the course of the well from the moment it leaves the surface. (Continued on Page 26)



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TO INSURE AMPLE freedom of movement for Egan's stage-mounted camera, when shooting scenes for "All About Eve" on location at Fox

Franklin's old Cohan Theatre, a lengthy platform was built at stage level and extended out over the assembly seats.—Photos by Helen

The Filming Of "All About Eve"

Deft, subtle cinematography by Milton Krasner lends class and authenticity to Fox's leading 1950 Academy Award contender.

By LEIGH ALLEN

AMONG THE pictures of Academy award caliber to come out of Hollywood during 1950, "All About Eve" is sure to be a leading contender for honors in several departments. Written for the screen and directed by Joseph L. Mankiewicz, "Eve" is his picture; so'll, deeper analysis will reveal the contributions of others who made this success possible—the acting, art director and especially the photography by Milton Krasner, A.S.C. There is evidence throughout the picture that uncommon deep understanding and cooperation existed between Mankiewicz and his director

of photography Krasner, which enabled Mankiewicz to imbue the picture with the vitality, warmth and sparkle that easily makes it one of the top pictures of the year.

Members of the distinguished cast give perhaps their best performances in many seasons, due first to Mankiewicz's meticulously detailed script and his superb direction, and last but not least to the artist cinematography of Krasner which, even to many within the industry, may go relatively unnoticed because of its subtlety. Here is photography that never cease calls attention to the artifice of the

camera. All too often the vital part photography plays in a great picture goes unnoticed simply because the story and individual performances are so absorbing; the very subtlety of the camera work which has contributed to the story's compelling qualities makes them seem more brilliantly than might have resulted with less insured cinematography.

"All About Eve" is Krasner's third picture in a row for Mankiewicz. Functioning as a team, once shooting preparations began, Krasner and Mankiewicz plotted the photography of "Eve" in a number of huddles that usu-

them make location scouting trips to gether to San Francisco and later to New York to select theatre exteriors against which so much of the scene takes place.

On March 15th, with the script virtually completed and the most pressing production problems settled, the two flew to New York. There, using doubles for Bette Davis and Celeste Holm, they shot the exterior of the New York theatre which would be in with the scenes to be shot later in the Curran Theatre in San Francisco. The exteriors of the "21 Club" and Eve's Park Avenue apartment were also photographed as establishing shots for interior scenes and for background plates for scenes to be shot later at the studio. To light these scenes, Kraemer used portable Calorific lighting units, and the footage was later-sold at time of processing to bring it up to full value.

When shooting the night exteriors in front of the John Golden theatre, Kraemer received unusual cooperation from New York City police. In one instance, when the company was shooting after midnight, an officer displaying knowledge of photography, suggested to Kraemer, "You haven't much depth in the background here. How would you like to have those neon signs in the distance lighted up?" And when Kraemer agreed, the officer dispatched another to the task of inducing store and cafe owners a block away to light up their signs.

Because the story has a New York locale, it was necessary to find a theatre there whose lobby closely resembled in detail that of the Curran in San Francisco where most of the picture's vital shooting was to take place. The John

Golden Theatre was selected and here scenes and background plates were shot which later were to match up with similar shots made in the Curran theatre lobby.

Shooting at the Curran theatre began on April 11, as scheduled. The theatre closed with actors as Kraemer and his camera crew prepared it for shooting. Electricians were everywhere rigging lamps and laying cables, but long before this, Kraemer, his gaffer and Markiewicz had paid a visit to the theatre to scout the power source. It was desired to shoot scenes at the theatre without having to bring up from Hollywood a generator to supply power for illumination. Kraemer and his gaffer found the power lines running into the Curran inadequate to supply the needed voltage, and it became necessary to find a means of getting additional current. Together they checked adjoining buildings and happily found they could bring additional lines into the Curran from an adjoining theatre, but not before considerable time had been spent lifting manhole covers in the street and checking underground power cables, transformer capacities, etc., to make sure that no power failure would result in the midst of shooting.

The next important step was to lay a sturdy platform over a section of the theatre's orchestra seats at stage level to provide unhampered working space for Kraemer's camera and the Junior Crane on which it was mounted. An interesting point is Markiewicz's preference for this crane as a camera mount, regardless of one of the sets. As a result, practically every scene in the picture—location shots as well as interiors—was shot with the



MILTON KRAEMER, A.S.C., who directed the photography of "All About Eve," studies Martin Marlowe for proper lighting, using a reflector viewing glass.

camera mounted on a Junior Crane. All the necessary camera movements for the theatre interiors had been carefully planned and charted by Kraemer and Markiewicz when earlier they had scouted the location. Now as shooting began, it was merely a matter of referring to these carefully laid plans and following them to the letter.

Before shooting the important scenes in the lobby of the Curran, it was necessary to erect special scaffolding to hold the lights, a matter that presented no small problem because the crew was not permitted to drive nails into the lobby

(Continued on Page 27)



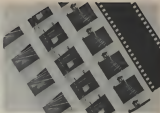
KRAEMER's careful attention to lighting detail, which characterizes the entire picture, is exemplified in this scene from "All About Eve." Throughout the scene the lighting is calculated to "fry" highlights on objects. The illumination actually seems to come from the lights visible in the scene.



ONE OF SEVERAL scenes in which background production was employed. The New York street scene, shot earlier, served as background plate for this perspective group, while Anne Baxter and George Sanders walk on Broadway in foreground.



ABOVE—Field equipment for making Cinerama movies consists of Cinerama camera and portable magnetic sound recording units. Left is man in standard cinematograph outfit of cinema movie houses. AT RIGHT—Put these four films together and you have a Cinerama movie. First three from left-hand, center and right-hand parts of



picture, when projected side by side on theater screen. Each film of right section is sound track that records theater's multiple loudspeakers for almost sound. Picture frames are one-half again standard height—cinema screens shaded film film & picture frame of a film instead of usual 4.—Photos courtesy Popular Science

Cinerama--Super Movies of the Future

Newest approach to practical three-dimension motion pictures is system that puts image on three films which are screened by multiple projectors on a curved, segmented screen.

Courtesy International Prentiss Inc.

CINERAMA pictures are expected to make their first public bow early this year, with arrangements for permanent installations in theatres sometime about mid-1951.

Cinerama is the brainchild of Fred Waller, formerly with Paramount Pictures, and designer of the famous Waller Guntery Trainer, which utilized a five-lens camera and five projectors to show airplanes realistically on a curved screen. The Cinerama three-lens system is a simplified modification of the earlier setup. The sound recording and reproduction system was engineered by Harold Reeves, of Reeves Sound Studios (N.Y. City) who compiled an impressive record for electronic tracks during World War II.

Cinerama's sponsors do not claim that their pictures are stereoscopic or three-dimensional movies, that is, in the strict technical interpretation of these terms. Such films require either a special screen that only a limited portion of an audience can view from a precise rigid-necked angle, or the use of anaglyphs or special spectacles. No such extraneous gadgets are needed by Cinerama audiences, who view the screen images in wholly normal fashion.

Normal binocular (two-eyed) vision,

while playing an important role in the viewing of motion pictures, is only part of the overall reason why such images seem real. Cinerama starts from this basis and, by skillfully combining other elements of human vision and intricate complementary optical and mechanical equipment, produces what is substantially a stereoscopic effect.

In real life one can look all around as well as straight ahead; and the Cinerama big "wrap-around" screen of 8 times standard size and a times as wide forms a great curving arc across one's field of view that surrounds the onlooker with the action and gives one the feeling of being right in the midst, not outside, of things. Images in closeups appear so near and so real that one feels he could reach right out and touch them. This impression is achieved by the picture-taking lenses that match the human eye in focal length and give exactly the same perspective.

Not in the eye alone subjected to this amazing simulation of reality. Truly stereophonic sound positions the sound at exactly on the point of the screen from whence the sound emanates, even from behind the viewer.

The filming and projection of Cinerama

movies represents a prodigious feat of planning and execution—everything is on a grand scale. The eye-filing picture covers a field of vision about 146° wide and 55½° high—which compares with the extreme limit of human eyes of 160° by 75°. Even the most satisfactory wide-angle lens couldn't possibly accommodate more than a fraction of this sweep, thus the reason for Cinerama's three-cinemas-in-one.

The eyes of this 150-pound camera are three matched lenses of 27-mm focal length set at angles 48° apart. Each lens records one-third of the total width of the scene upon one of three standard 35mm film earned in as many film magazines. Otherwise, the three sections operate as one.

The lines of sight of the three lenses converge and cross at a point 11/16 inch in front of them, where a single revolving-disc shutter serves them all, thus assuring synchronization of exposures. Simultaneous focusing of all three lenses is accomplished by a single knob, while another knob controls the diaphragm settings in unison.

Individual Cinerama film frames are one-half again standard height; and since
(Continued on Page 26)

Modern Laboratory Stimulates So. American Film Production

By JOHN FORBES



CINERAMA camera system puts scene on 1 film, each making up 1/3 of the picture. Closeup shows about nearly vertical size of camera's 3 lenses positioned 48 1/2 inches line of sight of each lens across at a point 17 1/2 in. in front of film, where simple vanishing-does (left) serve as a shutter for all lenses.



SOUND HEADS at the Cinema magneto sound recording system. Studio has recording heads covered by 2 banks of 3 coils. He raised the pickup of its microphone which supply stereophonic sound for film.



CURVED SCREEN for Cinema system has and section of vertical film, arranged like that of Vanishing Point. This eliminates reflection of light from side to center of the camera screen, which detracts from clarity of picture, where ordinary screen material is used.

MOTION PICTURE production ventures in South America are destined to make accelerated progress in the next few years, thanks to the foresight and imagination of Carlos Santos Santini who years ago put his cinematic teeth in the hobby of amateur movie making, and ultimately gave Latin America one of the finest motion picture laboratories in the world—Laboratorios Alex, S. A., in Buenos Aires, Argentina.

Recently Laboratorios Alex celebrated its first anniversary, the culmination of a dream that began when on May 1, 1928, Santini's father, Alex Canas, opened one of the first steam film laboratories in South America at 496 Maipú Street in Buenos Aires. When Alex Canas passed away in October 1937, Carlos Santini assumed control and began to lay the plans for the present Laboratorios Alex, S. A. Meanwhile, Santini had visited most of the large film laboratories in the United States and Europe, and from observations gathered on these visits he designed the plant which he now heads as president. Construction of the new building began in 1948, and the plant started full time operation late in 1949.

The sleek, modern plant, with a payroll of more than 300 employees, features some of the most advanced methods and film laboratory equipment, much of it the design of Santini and his engineers. The single story structure which covers an area of 20,000 square feet, houses a developing room, printing room, seven projection rooms, twelve editing and cutting rooms, a complete title department, and a modern optical printing department. Editing, cutting and projection room facilities are available on rental to local film studios and to individual producers.

Some idea of the plant's general business may be had from a survey of Argentina's motion picture industry, which reveals eight major film producing studios comprising thirty-two sound stages—mostly in Buenos Aires and its suburbs—factors which give Buenos Aires undisputed claim to the title, "The Hollywood of South America."

Developing room equipment consists of four 35mm positive developers,

(Continued on Page 24)



LABORATORIOS, ALEX, S. A., South America's newest complete film processing plant, located in Buenos Aires, Argentina, serves the growing Latin American film industry. Inset is photo of the company's president, Carlos Canas Santini, who designed the plant and supervised its construction.



A New Revolving Camera Mount

New M-G-M development makes possible trick shots involving rotation of the camera.

By FREDERICK FOSTER



NOT ALL TRICK SHOTS are the work of the special effects department. A great many still originate in the camera and for this there is frequently need for some new and novel camera gadget or accessory. One such gadget was recently completed at Metro-Goldwyn-Mayer studios under the direction of John Arnold, A.S.C., the studio's executive director of photography and designer of the gadget.

Known as the Revolving Camera Mount, the device provides a balanced rotatable mount for either Mitchell or Technicolor cameras, permitting camera to be rotated on its lens axis while it records the scene. The only other piece of equipment of note which has been designed to achieve similar effects is the "squirrel cage" built by Warner Brothers' camera department several years ago. This has seen frequent use in other studios and it made possible many of the spectacular effects seen in George Pal's *Destiny Manoeuvres*, released earlier this year.

The new MGM mount also makes possible shooting with the camera tilted on its side at various degrees or in upside down position. It may be used in conjunction with any of the large camera cranes, although it is most commonly used mounted on a dolly or camera parallel.

When either a Mitchell or Technicolor camera is mounted in place, the lens axis is always centered with that of the rotor. The slight displacement between centers of the Mitchell and Technicolor cameras is taken care of by a shim inserted between camera and the base.

The accompanying photos show the camera mount in various positions of a complete 360° rotation as well as a full 360° pan, for which action the mounting also provides. This operates on a friction head principle, with a lock screw or the side that provides varying degrees of drag on the head or completely locks it in any position. The rotating action is controlled by a sturdy hand crank which drives a large master gear attached to the rotor. Another geared crank provides for tilting action up and down within a range of approximately 65°. This action is perfectly balanced so that the camera remains in position without locking.

Sliding weights mounted on a tubular shaft extending from the rear afford accurate balance of the camera and simplify its maneuverability. The hollow shaft also functions as a channel for the electric cable which connects with the camera.

(Continued on Page 28)

WITH a standard Technicolor camera mounted on the new MGM Revolving Camera Mount, device is rotated to show some of the unusual positions in which camera may be locked in place. The trick shots Camera may also be rotated on its lens axis while shot is being made, tilted up or down 65 degrees, or panned. 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3761, 3762, 3763, 3764, 3765, 3766, 3767, 3768, 3769, 3770, 3771, 3772, 3773, 3774, 3775, 3776, 3777, 3778, 3779, 3780, 3781, 3782, 3783, 3784, 3785, 3786, 3787, 3788, 3789, 3790, 3791, 3792, 3793, 3794,

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New Technique For "Sync" Sound On Quarter-inch Magnetic Tape

PART I

By WENTWORTH D. FLING

*Vice President and General Manager
Fairchild Recording Equipment Corporation*

PRACTICABLE magnetic tape recording may well be considered the greatest single advance in the sound field in the past ten years. By now, it has been integrated into practically every phase of

studied the question of applying $\frac{1}{4}$ -inch magnetic tape to professional synchronous sound track recording because of its great economy, superior fidelity, excellent motion and ease in handling. The need, as they saw it, was for recording and playback equipment which would maintain synchronism with a picture film—either 35, 16 or 8 millimeter. The problem was turned over to the D. G. C. Hare Company of New Canaan, Connecticut, which does a large part of the research work in the field of magnetic tape recording for the Fairchild Corporation. The project of the D. G. C. Hare Company was to modify the Fairchild Professional Tape Recorder so that it could record and playback in synchronism with cameras, kinescope and projection equip-

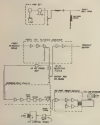


FIG. 1—Block diagram of phase control system, showing how control track generator takes sample of the a.c. voltage driving camera motor and uses it to modulate the synchronizing tone.

ment recording and reproduction, and new appliances are being developed almost daily.

The advantages of magnetic tape are numerous. It is a recording medium which may be reused almost indefinitely with no loss in sound quality. Delayed broadcasts from tape are common, and the fidelity is such that, except for the required announcement, listeners might never know they were hearing recorded programs. The time saved in recording sessions for phonograph records is almost beyond calculation. As a production "tool" providing editability and final make-up for "pointing," sound-on-tape equipment is universally recognized as the right hand, arm and shoulder of the production department. It is only natural to find use for the new medium in motion picture work where economy without sacrifice of quality is tyrannical.

The Fairchild Recording Equipment Corporation of Whitestone, New York,

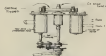


FIG. 2—Elements of the motor drive. The reference motor at right controls speed and synchronicity of camera shaft to maintain synchronism.

more. The project was completed and activated as the Fairchild Professional Recorder Unit 125 with Pic-Sync Attachment Unit 130. (See Fig. 3.) For simplicity's sake, it is now called Pic-Sync—a contraction of "picture" and "synchronism." The Fairchild Pic-Sync Tape Recorder employs $\frac{1}{4}$ inch magnetic tape and, with only the frequency of the line as the synchronizing reference, and with no electrical inter-connections, can maintain synchronism indefinitely with cameras or projectors.

A further development known as the Automatic Framing Control may be added to the Pic-Sync so that, using a single master switch, the tape recorder can start simultaneously with cameras, kinescope and projection equipment, and fall into locked synchronism automatically.

Basically, the method by which the Pic-Sync system maintains synchronism is not at all complicated. It is only necessary to record on the tape a "sample" of the a.c. voltage that is driving the camera motor while the original recording is being made. This is done by automatically mixing the signal from a built-in *Control Track Generator* with the program in the recording amplifier of the tape recorder being used. Once this is done, the tape may thereafter be played back on the Pic-Sync Recorder in exact synchronism with the picture. During playback, the Pic-Sync compares the phases of the recorded sample and of the voltage driving the projector, translates the phase difference into torque, which in turn causes the speed of the tape to keep in step with the projector.

Since the a.c. voltage which drives the camera or projector is at a frequency (usually 30 cps) which is audible to the human ear, this voltage is not recorded directly on the tape, but is used to modulate a 14,000 cps tone produced in the *Control Track Generator*. It is this 14,000 cps tone modulated with the 30 cps line frequency which is recorded. On playback, this high frequency signal is automatically separated from the sound track. The high frequency control track signal is demodulated, leaving the 30 cps signal. It makes no difference whether the frequency of the a.c. line voltage was exactly 30 cps at the time the original recording was made, nor whether it is exactly 30 cps at the time of play.

(Continued on Page 36)



FIG. 3—The Fairchild Professional Recorder equipped with the "Pic-Sync" unit which records magnetically on quarter-inch tape in synchronism with camera, kinescope, or projection.

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... the most versatile and dependable camera accessories available for those who prefer the finest.



SUNSHADE & FILTER HOLOER COMBINATION

SUNSHADE & FILTER COMBINATION

For use with Buxton and Cook Special 16mm. cameras. 2" sq. glass screen and 2 1/2" round filter. Screen has 100% light transmission with haze which can be rotated for 60° to 180° in 15° increments. Screen is made of 1/8" thick clear acrylic plastic. Covers all lenses, from 15mm. lenses to 100mm. lenses, and eliminates need for various filters. Available in the finest iridescent Camptulac finish. Made in the U.S.A. May be purchased in bulk and sold quickly detached.



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CINE SPECIAL**

This blimp constructed at New Miami over-
sees a thoroughly insulated, air-filled
pressure vessel which is capable of with-
standing a pressure of 100 lb. per sq. in. The
blimp is used to observe the operation of the
engine and the operation of the drive which
operates the engine. A diverter truck is
provided to ensure an exact image transfer.

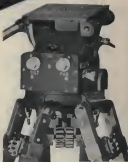


SYNCHRONOUS MOTOR DRIVE
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The water was put in the
either I (over) or Miss, would
provided the mounting platform which re-
nails remained in the water.
Drugs mounted on the water. The water-
of canvas and it made the apparatus drive
with a motor gas tank. The apparatus
tame a machine on the spring steel wire
the first machine on the spring steel wire
with steel. This is a small machine
A famous knob on "On" switch. This
nothing for showing. The "On" switch
to the back. The machine is a small
the camera via the lens. The machine
little with a plug in the back.



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You must file an entry blank with the contest chairman prior to submitting your film. Use coupon below to secure your entry blank.

TEN American Cinematographer Trophy Awards are the prizes that await the makers of the TEN TOP films entered in our 1951 competition, which closes March 1st. Judging and classification of films begins December 1st, 1950. Six leading Hollywood directors of photography will make up the judges panel.

RULES

- Each entry must be wholly amateur produced except for any titles and film laboratory work. Any sound accompaniment must be recorded exclusively by the entrant and/or his amateur associates.
- Film length limited as follows: 8mm., 400 feet; 16mm., 800 feet.
- Each film reel and its container must be plainly and securely labeled with owner's name and address.
- Films originating outside the continental United States should be securely wrapped or boxed, preferably in cartons which may be used for their return. Also, necessary arrangements should be made that will insure films passing all necessary customs and export-import regulations on their return.
- All films must be shipped on reels and in cans to contest headquarters in Hollywood, fully prepaid. Entry blank should be mailed to contest chairman in advance of sending films. There is no entry fee for contest films.
- Upon close of competition, all films received will be returned via Express collect and insured (in the United States). Contestants residing outside the United States should make the necessary arrangements in advance for the return of their films in keeping with their country's postal and import regulations.
- Fees for return postage and insurance for foreign films should be sent contest chairman with entry blank. In 1951 postage an International Postal Money Order will be the simplest way to handle this.

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Amateur Cinematography

SECTION



TYPICAL montage sequence that sets the stage for a travel film: passengers boarding plane, plane preparing to take off, and finally land from a radio window of the airplane resting in flight. Note division given to dramatic composition in each shot.—Photos courtesy Trans World Airline



—MONTAGE: we meet athletes whose action develops smoothly in a question—a simple procedure with the Cine Special camera we have, which features variable shutter adjustment and manual speed winding back film.

A DISTURBING quality of amateur film-making is that no matter how far we progress, there is always a new technique or a new artistic goal before us. We attain a proficiency in composing scenes, and we discover that our editing is weak. No sooner do we edit competently, than we become dissatisfied with our continuity. And now I'm setting before you a new challenge that may leave you restless until you can say in truth, "My montages are the equal of those in other class productions today."

Incidentally, if you have filed your copies of *American Cinematographer*, you may wish to refer to Herb A. Light-

The Role Of The Montage In Amateur Movies

An important professional cinematic effect, montage lends style to amateur films, compresses time or effectively condenses action through a series of quick cuts joined by fades or dissolves.

By CHARLES L. ANDERSON

man's article, "The Magic of Montage," in the October, 1949, issue. Mr. Lightman discusses the use of montages in professional theatrical films, and much of his information is adaptable to amateur and documentary films.

Your vacation movies offer perhaps the best field for incorporating montages. Properly, you must omit floundering hundreds of miles of any journey for lack of film and time, but there is no reason why highlights of the lesser parts of a vacation cannot be well presented in quick cuts. The real "feel" of a trip can be better expressed if the audience sees flashes of places on the way or of the means of transportation. However, these short shots can become irritating if they are inserted haphazardly. A montage should have coherence and rhythm. Coherence is gained by giving the montage well-defined limits. It can begin with a big close-up or an angle shot that definitely sets it apart from the rest of the picture. When it has ended, a leisurely long shot will inform the audience that they are back to the main theme of the picture. Of course, if you produce your montages with division and

(Continued on Page 22)



TAKE Time to experiment with new and different camera angles, unusual compositions. Here we learn why to give your film a classical note—an emotional point of emphasis

ONE OF THE MOST important elements which distinguishes the cinematography of the amateur cameraman from that of the professional is the abstract quality known as *style*. The term becomes less abstract when we realize that style is nothing more than the cameraman's own original technique transcribed into technical terms. In the case of the professional cameraman, this is usually the result of many years of trial-and-error experiments, plus a desire to produce a result that he can consider uniquely his own.

Once the novelty of merely getting a motion picture onto film has worn off, the cine-amateur will naturally want to experiment in developing a style that is individually his. This

EXAMPLE (above) of a composition that is strikingly different. It required imagination and patience to stage this scene so that it becomes an effective silhouette shot in the street.



Developing "Style" In Cine Photography

How to add those cinematic touches that make your movies win contests and influence people.

By CHARLES LORING

IS NOT AS DIFFICULT AS IT MAY SEEM, nor is the approach to style merely a collection of abstract theories that leave the cameraman bewildered as to course of action. On the contrary, there are certain very concrete approaches, some of which we shall analyze here.

First of all, admitting that a cameraman has developed individual style, we do not mean that he approaches every subject in the very same way. If he did all his films would have a "sameness" that would soon get tiresome, both to himself and to his audience. Every top-notch Hollywood cameraman displays in his work certain evidences of style which are typical—such as wide angle shots, moving-camera shots, unbalanced lighting, etc.—but these men are at the top of their profession because they are able to modify their trademarks of style to perfectly complement whatever assignment they are handed.

If you wish to speculate in one certain type of motion-picture work, it is advisable then to study that type as executed by professionals. For this purpose, your neighborhood movie theater becomes a fine classroom, since here may be seen and studied not only dramatic photoplays but documentaries and newsreels as well. If you would be interested in developing a style suitable for the making of commercial films, you will

(Continued on Page 32)



TOD GREEN made cameraman film a scene like the above July 21 by a number of photographs. How much more effectively for the student would have occurred in this shot through use of a single photograph in overhead light, plus a small spot playing faintly on faces of person at right.



What? A "blue" sky in black-and-white movies?

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Don't Talk Too Much!

... when giving a running commentary on your films.

By DOUGLAS GOODLAD

Condensed from Amateur Cine World

ONE OF THE SECRETS of an effective commentary is knowing when to shut up. Most amateur commentaries are too talkative, and many—for too many—are full of twice-baked cabbage. It is not just a question of mere verbiage.

There is another common form of repetition which is perhaps worse—commentaries which only echo verbally what is conveyed visually—and adequately. The commentator points out the obvious. He can spoil a lovely shot by trying to describe what makes it lovely. Every picture tells a story—but he wants to tell it all himself. And so he holds forth at length about scenes which require little explanation. Watching his film is like watching a play with someone reading aloud the stage directions.

Commentary should add something to your film, instead of merely repeating parrot-fashion what the camera has put there already. Certainly it should never make your picture boring. It should enhance it. And it should increase enormously the advantage of movie making, as well as the individuality of your picture.

You need go to some trouble. The commentary must be planned. It's not so easy as this question from the instructions for use of a well-known tape recorder would have you believe.

"It is preferable to show the silent film several times and decide on the prologue, etc., you propose adding and where musical accompaniment would be suitable. In general, 'script' the film."

The advice about scripting is added as an afterthought! To make the best job, the visual and vocal sides of your film should, of course, be scripted together. True, there are those who wish to add commentary to existing films. Whichever way it is, avoid repetition and excess detail like the plague.

But the indicating of the silent features of four shots with a nicely turned phrase or two is a different matter. Let the commentary act as a foil to your pictures. Make it the pinch of salt which brings out the flavor. As an example, here is a question from the light-hearted verbal accompaniment E. V. H. Everett supplies for *The Swan Trade*, a delightful two-reeler on the life of a wild bee. Emmett has christened the heroine "Glady's." He says: "She makes her way into the nest, pushing on into the warm scented air. She's rather short-

sighted, but as she crawls deep into this fairy cavern the shape of shimmering wax passages gradually comes clear. They are honeycombs. Glady's isn't interested in fairyland, somewhere among a hundred thousand bees she has to find a housekeeper bee to take the honey she's brought home."

How have those four sentences enhanced the visuals? Emmett has described the hollow tree where the wild bees live as a fairy cavern. It's a simple, but pretty, idea. He talks of shimmering wax passages. Passages they are, so a bee, and the phrase reminds us that we are getting a bee's eye view. He talks of the "warm, scented air." That's something the visuals could not convey. It adds atmosphere in both senses.

And an example from a film of my own. I'm just completing a Kodachrome film on wild flowers, with commentary on tape. A preamble includes shots of garden flowers. One of them is a glowing, against-the-light shot of huge cultivated poppies. I remark: "And here's the brightest flame of Blazing June."

There's nothing clever about that, but the words spotlight those poppies. They enhance the shot in the same way that a caption written by a newspaper editor gives a photograph a little extra something, or the title of a picture in a photographic exhibition helps to put the picture across to the viewer.

Sometimes it is better to let a shot speak for itself. Some examples of what I might have been tempted to do with a fragment from the flower film will help to show why. One of my biggest problems in making the film has been to introduce movement (other than that of flowers, nodding in the breeze). So I probed the opportunity of photographing my blossom against a waterfall. The white foam matches the white of the blossom, and the May sunshine is reflected in the water—particularly in shots filmed actually through the waterfall.

I could have pointed out the comparison of blossom and foam. I could have talked about the sunlight glinting like diamonds. But my pictures convey all this adequately. A filp to the observer is unnecessary. I could have committed the terrible offense of wandering from the subject at hand by exploring that the through-the-waterfall shot was pho-

(Continued on Page 38)

MONTAGE IN AMATEUR MOVIES

(Continued from Page 36)

overlaps, the appearance and disappearance of double-exposed footage will signify their limits.

The rhythm of a montage should definitely be different from that of the picture as a whole. It presents a refreshing change of pace, and our eyes are more willing to watch the slower sequences when they have had their fill of scintillating movement. Some editors claim that judge the rhythm of the film they are cutting by the physical length of the shots and the appearance of the frames as viewed over a ground glass, while others prefer to re-run the film in a projector several times and develop a rhythm by trial-and-error. Editing requirements for amateur films are not so exacting as for the professional, and you may be quite capable of making suitable montages entirely on the cinema.

If the trip you're filming is by plane, you might communicate some of the thrill of the take-off in a short montage. The airport setting could be established with shots of the control tower, field, and passengers boarding the plane. Then your silent footage seems to reproduce even the roar of the engines as details of the take-off appear on the screen.

An effective short sequence could follow like this:

1. Door of plane being closed. (Taken from outside. The audience assumes from the cutting later that you are inside the plane.)
2. The control tower.
3. Close-up of propeller starting (Taken with telephoto.)
4. Buttenders at gate watching plane.
5. All four engines turning over.
6. View of tail as plane begins to move.
7. Plane taxiing on runway.
8. The take-off.

To film a sequence like this, you might have to be on hand for the take-off of two or three planes, but the time spent on a good montage may indirectly improve the entire film.

Probably the most common montage in amateur productions, and one the professionals have made repeatedly, too, is the sequence showing the night lights in a big city. The non-Mazda kalmidoscope that cries become at night is easily captured in montage form. Lights flash on and off and change into other lights through the editor's skill. They can share from every corner of the screen to become a more glow on the horizon. A clever choice of camera angles and lenses can cause an ordinary business district at night to meanly out-dazzle Times

Square. This is one montage that has become a synonym for "cliche" in the film world but which manages to amuse audiences again and again with its laminated display.

Mood can be presented in a montage, too. A quiet, pastoral mood would seem to demand upon a film opened with a series of slow dissolves from one static scene to another. Dissolves smoothly would the shots together, avoiding a quick change for the eye to assimilate. The film-maker's impression of a rainy day may be given as accurately as if he spoke it himself. If the impression be one of light-heartedness amidst the downpour, quick shots of droplets splashing in pools of water intercut with gay reflections of the lights on the wet streets will convey the idea. But if the cameraman wishes to tell of the gloom he feels in the rain, somber compositions of black clouds and empty streets will convey his thoughts.

Perhaps you might discover in your editing that the montage may be added as a type of footnote. An extra idea, a bit of information or narrative that adds to the film's meaning will be helpful at times but also distracting. By placing this extra material in a short montage, you present it in digest form without interfering too greatly with the main body of the picture. As an example, one amateur filmer made a 200-foot color picture of his fine flower garden. He was justifiably proud of his handiwork and enjoyed showing his film to friends during the winter when they couldn't see the garden in full bloom. But he also wanted to remind them of all the work that went into such a project, and he therefore made a clever montage sequence of himself spading, planting, pruning, and spraying. The essential theme of the film was the beauty of the garden but this other footage, inserted in about the middle, added the thought that those flowers don't grow by themselves but are carefully nurtured. The photographer had his wide shot about thirty feet of screen of him which he and I later cut in a tight twenty feet. In addition, this special footage became a welcome change of pace from the slow cutting of the pictorial scenes.

Commercial films have one burden placed upon them that is not usually met with in entertainment pictures. This is the need for making the audience remember the picture's message. Motion pictures are not seen all at once like a diagram on the printed page, but are seen in a time continuum. Each new scene attracts the observer's attention to itself away from the preceding scene, and the message being presented may thereby be overlooked by an audience. A summary montage at the end of a picture may seem

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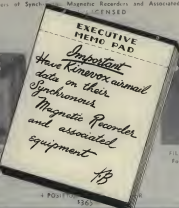
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repetition, but it also remind the audience of the film's content. A Red Cross film on lifesaving concluded with a summary of the vital steps in rescuing a drowning person. The screen portion contained dupe-negative clips from earlier sections while the narrator distinctly explained each step. A single running of the picture gave audiences an excellent perspective of lifesaving before their actual training in the water.

Cameramen occasionally discover a subject that intrigues an audience by the effectiveness of its inherent movement alone. Skiing scenes are exciting even after the beauty of the landscape has worn thin, and the movements in skiing can be exploited to the utmost through clever montage cutting. Fast downhill runs, sharp turns, quick falls may be cut together to present a view of the sport one is unable to see at the actual ski resorts.

Pace Loewie produced a thrilling minor cinema in his film, "The River," by dramatizing the felling of trees. Gigantic trees were photographed toppling

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over and then cut together one after the other without a fall until a *doosa* had been seen coming down. Here, an important idea—the felling of entire forests—was presented forcefully with only a few trees actually seen being cut down.

"SYNC" SOUND ON QUARTER-INCH MAGNETIC TAPE

(Continued from Page 16)

back. The important fact is that the control signal is a measure of the actual speed of the camera during the recording, and on playback the speed of the recorder is either increased or decreased to keep step with the speed of the projector at that particular time.

Referring to Fig. 1, it will be seen diagrammatically that the microphone picks up the audio signal, which passes through the amplifier and the Control Track Generator to the recording head. The generator takes a sample of the a.c. voltage driving the camera motor and uses it to modulate the locally-generated 14,000 cps tone. Thus the tape has recorded on it a composite signal consisting of the desired audio signal along with the modulated 14,000 cps tone.

During the "record" process, the tape speed is held synchronous by a unique tape drive mechanism, the *Synroll*. For simplicity, let it be said that if the load caused by the tape—which is not large enough to affect the speed of the main drive motor—applies a drag (a change of speed) to the capstan shaft, the synroll mechanism follows up immediately and speeds the capstan just enough to restore the tape to synchronism. Conversely, if the tape load tends to drag and thus speed up the movement of the capstan shaft, the synroll mechanism follows up and the capstan is slowed. The synroll effects a dynamic equilibrium of tape load versus capstan speed, maintaining synchronous recording speed.

If the tape is recorded synchronously, why then special equipment and a control track? Tape is affected by temperature and humidity conditions. It stretches and shrinks, even though it may be lying idle in storage. Recording a control track on the $\frac{1}{4}$ inch magnetic tape provides a reference as to the original geometry of the tape so that automatic compensation can be effected during playback.

Magnetic, sprocketed film is subject to the same dimensional changes from the same causes. However, correction for synchronism is applied by the drive tooth engaging the film sprocket and literally compressing the stretched frames, and stretching the frames that have shrunk

The montage is a challenge to any cinematographer who has never tried it before. The pitfalls are many in this exacting branch of film-making, but the pride of accomplishment in an exciting, meaningful montage is worth the task to the adventurous cinematographer.

The recognized evils inherent in a sprocket driven sound track, whether it is on an optical or magnetic film medium, are severe instantaneous sound flutter as the sprocket engages the sprocket hole, and an actual tearing and rapid deterioration of the synchronizer, the sprocket hole.

In Pic-Sync playback, the synroll mechanism is de-activated. The composite signal is picked up off the tape, amplified, and fed into the filter circuit which separates the desired audio signal from the modulated 14,000 cps tone. This tone is demodulated in the control unit, amplified, and fed to one winding of a two-phase induction type follow-up motor which is mechanically coupled to the capstan flywheel. (See Fig. 2.) The second phase winding is energized by the voltage driving the projector. If there is a difference or change in phase between the two voltages applied to its windings, the follow-up motor either helps or hinders the movement of the capstan shaft.

The synroll drive mechanism of the Fairchild recorder is capable of maintaining a constant speed of the tape past the recording heads because (1) the wrap of the tape around the relatively large capstan is sufficient to eliminate slippage entirely, and (2) the capstan shaft is maintained at synchronous speed by the unique synroll drive mechanism. Thus, of all the recorders now available, the Fairchild maintains the most accurate tape speed with respect to either long or short time intervals.

The advantages of the Pic-Sync system are particularly attractive to 16mm motion picture work. The reproduction of the steam recorded sound track from available projector leaves something to be desired with respect to frequency response, flutter, and wow, even though synchronism is readily maintained. With $\frac{1}{4}$ inch magnetic tape, it is possible to provide sound quality for 16mm pictures which is even better than 35mm optical recording. Because of the low signal-to-noise ratios of optical recorders, 40-45 db is the usual, dubbing of sound tracks using the optical medium is quite restricted. In fact, where it is desired to maintain low distortion factors, dubbing

must be virtually avoided. However, the Fairchild Pic-Sync has a dynamic recording range of 62 db, using the NAB standard as reference. It can be seen that if the limited dynamic range of 45-45 db encountered in optical recorders were to be applied to the Fairchild Magnetic Tape Recorder, an extraordinary number of dubbings could be taken before distortion and noise factors become restrictive.

For professional motion picture recording, an optical sound track "work-print" need ever be made until the assembly of the picture into sequences, at which time the final dubbing is done on to a master optical track. After this film is processed, all of the magnetic tape on which production recordings had been made is then released to be used over and over again. This results in an 80 to 90 per cent reduction in sound film cost alone, an appreciable part of the cost of sound recording in motion pictures. Since entirely separate media are employed for picture and sound track, it is obvious that no compromises are ever necessary between picture and sound quality.

Picture production with magnetic sound recording is in no way complicated. A single switch starts both camera and recorder, and "clap sticks" are used to establish a sync mark at the beginning of each take, a practice long used in professional production.

The cost of $\frac{1}{4}$ inch magnetic tape is so low that the initial investment for the sound track recording stick for any one production is ridiculously small—and, because of the reusability of the magnetic medium, this small initial investment can be amortized over a number of productions. Further, $\frac{1}{4}$ inch magnetic tape is light in weight and requires fractional storage space.

It is therefore claimed that Fairchild's Pic-Sync System advances the state of the art of film making with respect to sound track recording and it does so with unusual economy.

In this brief description of the Pic-Sync system of recording, the "Control Track Generator" has been mentioned. This compact unit, roughly 800/510/55 inches in size and weighing only 20 pounds can be connected to most professional quality tape recorders—without the addition of extra heads—enabling them to be used for synchronous sound track recording. The Control Track Generator will be discussed next month.



THE FILMING OF

"ALL ABOUT EVE"

(Continued from Page 27)

walls. The problem was solved by securing two-by-fours between the walls near the ceiling using wedges protected by felt. Small illumination units—baby lamps, small spots, etc.—were then suspended from the beams, which supplied the predominance of light from overhead. There were few if any light units on the floor. These interiors were the scenes that had to match those made earlier in the Golden Theatre in New York. Obviously this called for careful matching of lighting, and camera angle by Kravitz so that any small difference in the architectural detail of the two locations would be minimized if not obscured.

The important early scenes in the picture in which Anne Baxter meets Celeste Holm in the alley outside the theatre, were actually shot in the alley behind the Caran Theatre. In order to film these night scenes in darkness, Kravitz arranged to have the whole area covered with tarpaulins to keep daylight from the scene. Afterward, appropriate lighting was set up to create the low key illumination necessary to the illusion of night time. Here Miss Baxter set the tempo and timbre of her performance which thereafter holds the spectator spellbound—a performance which is given added lustre on the screen thanks to masterly lighting and skilled camera technique.

Anne Baxter, of course is not the star of the picture—there are five—including Bette Davis whose personality and charm is also seen in a new light through the lens of Kravitz's camera.

With the San Francisco location shooting wrapped up, the company returned to the studio where it settled down for more than a month of solid work. Here the studio had reproduced in infinite detail interiors of New York's famous Stock Club and Club 21. While the flawless detail is the result of both producers Zanuck's and Markowicz's unremitting pursuit of perfection, a big measure of credit is due art director George Davis, whom Kravitz rates as one of the very few art directors who always keeps the cameraman's problems in mind when designing sets. It was Davis' understanding of photographic and lighting problems that eased the way for Kravitz in all of the "Eve" interiors, because Davis had provided the unobtrusive openings through which Kravitz set illumination was to play so effectively—all this, of course, the re-

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salt of cooperative huddles at the time the set was being planned.

As related earlier, Krasner previously had shot background plates for five scenes which now were ready to be photographed on the sound stage. Background plates are scenes filmed at locations remote from the studio, then projected on a background screen in the studio with the players performing before them. The camera is synchronized with the background projector so that the shutters of both machines open and close simultaneously.

One of these background projection scenes had to do with Anne Baxter and George Sanders walking down a New York street toward the camera. In front of the BG screen a treadmill was placed and the two "walked" on this as the street scene unfolded on the screen in the rear. The final scene results is highly effective, thanks to the careful matching of the set lighting and camera angle by Krasner.

After a year in preparation—the last six months on a full production scale—

the picture was finished. Over a hundred thousand feet of negative film had passed through Krasner's camera and more than double that amount of positive film and sound track printed to get the fourteen thousand feet in which the story of Eve is told.

Krasner's solid cinematographic technique first attracted the attention of Mankiewicz when he was assigned to film the latter's "House of Strangers" for Twentieth Century-Fox. So effectively did these two artists work together that they were teamed again on Fox's "No Way Out." "All About Eve" makes the third Mankiewicz-directed picture to which Krasner has lent his camera artistry and he is currently awaiting the start on a fourth. Krasner set his first award-winning stride when earlier he photographed "Three Came Home" for Fox, for which he has received the American Society of Cinematographers' "Picture Of The Month" award for the month of April. Come next April, he may also have won an Oscar for "All About Eve."

CINERAMA—SUPER MOVIES OF TOMORROW

(Continued from Page 12)

three film strips are used, this means that the total amount of film used is 4½ times as much as for a standard 35mm motion picture.

After the camera has dissected the scene into three parts, it remains for the theatre's projection system to put the parts together again. This requires three projectors instead of the customary single one. Installation of these booths and of the large curved screen will adapt existing theatres to show Cinerama films.

From angles like those of the camera lenses, the projectors throw the three sections of the picture side by side on the screen. The center section of the screen is curved, usually on a 25-foot radius, and two flat wings are tangential to this curve. The depth of focus of the projecting lenses is great enough so that the curvature of the screen presents no problem.

An innovation in each projector is a mechanical device nicknamed a "pygmy" because it jiggles up and down. Just as a photographer makes a vignette, this monkey with a saw-tooth edge moves along the border of a film, so that the picture gradually fades from view at its edge. Thus adjoining films blend together on the screen without a conspicuous dividing line.

For realistic sound effects, 6 microphones in the field make individual tracks on a single 35mm soundfilm used for this purpose alone. Theatre speakers arranged in the same pattern as the microphones, are individually operated by the sound tracks. This produces the striking "sound-perspective" illusion that makes voices and music come from the right directions. A favored technique places 5 microphones and speakers, respectively, in a row across the full width of the movie set and the theatre screen. The sixth microphone is put some distance behind the camera and picks up "off-stage" sounds, reproduced in theatres by a speaker at the rear of the auditorium.

Recent strides in magnetic recording have led to the choice of magnetic-type sound film, which needs no laboratory processing and can be played back at once.

Like conventional movies in their infancy, the preview films are not entirely free of technical faults; for example, straight lines are distorted by certain camera angles, which must be avoided. As the sponsors point out, these are experimental films, which will be bettered as the possibilities and limitations of the

A NEW REVOLVING CAMERA MOUNT

(Continued from Page 12)

and furnishes power for its motor, preventing the cable from twisting while the camera is rotated.

The Revolving Camera Mount is constructed of steel and dural. The base consists of a length of eight-inch steel tubing mounted on a steel base plate. This is braced by three angle-iron members also welded to the base. The "L" camera mounting has been especially engineered to insure absolute safety of the camera and to withstand the fluctuating stress generated as the camera rotates. Generous use of ball bearings insure velvet-smooth action so necessary to any camera manipulation.

The rotation movement can be driven by electric motor whenever necessary, through the addition of a pulley, belt and variable motor. But in most cases manual operation is adequate for the effects desired.

Initial use was given this new camera mount at MGM when director of photography Robert Planck, A.S.C., employed it in shooting a track dance routine in *Royal Wedding*, starring Fred Astaire. The sequence called for Astaire to appear dancing on the walls and ceiling of a room—beginning first on the floor, then upon a wall at one side, chance on the ceiling, and down the opposite wall. The Revolving Camera Mount made it possible for Planck's assistants to quickly set the camera on

its side, and later upside down, in order to photograph the action with Astaire actually dancing on sets turned on their side or upside down.

Experienced cinematographers will recognize the many other photographic innovations for which this piece of equipment may be employed, and it is certain that this new MGM creation will find wide use in that studio of not in the entire industry, should MGM decide to make it available.

The Revolving Camera Mount is just another of the many cinematographic gadgets which Arnold is constantly dreaming up and putting into operation. Last month, you may remember, we described the Tripod East/Lift which he recently designed and put into production at MGM, which makes it easier for grips and camera assistants to lift and transport tripod-mounted cameras on sets and locations.

NEXT MONTH

The February issue will carry two unusual stories of films made by urban cinematographers: "Beaver Valley," Walt Disney's sensational short subject, and "Artery For Oil," documentary on laying pipeline in Western Canada.

Be sure you get the February *American Cinematographer*.

board technique are more fully explored.

Estimated as to the cost of Cinerama equipment installed in a theatre ranges from \$25,000 to \$50,000 per set-up, and although no figure has yet been named by Cinerama sponsors pending further development work, it is likely that the established price will be somewhere between these extremes.

Typical of the non-technical person's reaction to the Cinerama system are the following excerpts from a column by Robert Ruark, widely syndicated Scripps-Howard writer:

"I have just looked at the movies' answer to television, whether the movies know it or not. . . Its introduction into the average movie theatre is as inevitable as the adoption of sound pictures. . .

"As many fancy movie moguls hated the idea of the switch-over to sound, so are they cold to this new type of projection. But today many theatres are also installing massive TV equipment, with an eye to buying rights to big special events, for which they will block free showing on normal TV channels and for which they will charge admission. They are already frantic about TV intrusions and figure to become more so. This is when you will get the modern miracle of the movies."

Ruark may be right.

KEEPING UP WITH PHOTOGRAPHY

(Continued from Page 8)

until it reaches its bottom in oil bearing seals.

Since the performance of all film is directly related to the humidity conditions under which it is stored, the new Kodak Longograph Draft Survey Film is packed in vacuum-sealed packages which are not opened until the film is about to be loaded into the camera and the camera lowered into the well. This simple precaution brings to the technicians conducting the survey, film which is sure to be in "factory condition" when it is loaded into the camera.

In use the film is also further protected by the addition of a desiccating agent in the camera to keep the film as dry as possible during exposure.

ONE OF THE NEWEST developments of magnetic recording, as applied to the production of sound tracks for motion picture films, is a method of laminating a magnetic sound track over the regular optical track to provide simple, inexpensive "foreign versions" of business and industrial films.



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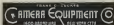
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Page 37 of this issue

Television Filming Activities

By LEIGH ALLEN

The Government's stepped up war preparation program has put in motion bills for an indefinite period all TV film producers' plans for color films for television. Accelerated defense preparation has shut off several vital materials necessary for color television receivers, and has greatly lessened the supply of 16mm color film. Most producers, if not actually already doing so, were planning their TV film shooting on 16mm Kodachrome so films would also be available for telecasting when and if color television arrives.

Paul Jackson, Jr., shooting on film the TV version of Ralph Edwards' "Truth or Consequences" show, finds the assignment full of surprises. Last month he flew to Alaska to shoot the efforts of one of Edwards' contestants trying to sell burials to Eskimos.

The production of motion pictures slanted directly for showing on large theatre TV screens may get an unexpected shot in the arm because of a new Television process, which Spyros Skouras of 20th Century-Fox reportedly has secured from Soviet interests exclusively for his company.

The system, known as the Eidophor, which was recently developed for large screen use, reportedly has an external light source which provides greater image clarity than any system yet developed in this country.

Walt Disney's "One Hour in Wonderland," hour-long filmed TV show televised Christmas day under sponsorship of Coca-Cola Company, reportedly had a nation-wide audience of several hundred thousand video viewers—among them scores of mighty intrepid television film producers.

Said the Hollywood Reporter's reviewer of the picture:

"If Walt Disney's 'One Hour in Wonderland' can be taken as a sample of what TV entertainment will be like when the making of such pictures is taken over by major producers, you can lay your chips on TV as a medium to keep the folks at home.

"The show is a sort of Walt Disney cartoon revue punctuated with the live

appearances of Disney himself as host, Edgar Bergen with Charlie McCarthy and Mortimer Snerd, Kathryn Beaumont, the voice of Alice in the forthcoming "Alice in Wonderland"; Bobby Driscoll; Hans Conrads, as the grotesque face of the slave in the mermaid who causes the various acts to materialize, and scores of others.

"Among the delightful specialties and story sequences are an elaborate production number performed by the Seven Dwarfs and Snow White, Mickey Mouse, and Donald Duck tangled in a clock-work, an Uncle Remus story, the Mad Tea Party scene from "Alice in Wonderland," caricatures of Ed Wynn and Jerry Colonna with their own voices, some jazz music by the Disney studio's own Firehouse Five Plus Two, and other choice tidbits, including a couple of brief clips by Mortimer Snerd with the amazing Plato that could have been developed fully only in the best Korda, Fran and Ollie tradition if time had permitted.

"Above all, the show had a freshness and newness about it that must have been welcomed with open arms as a relief from the mass of mouldy movies that have been filling the TV screen."

The live-action sequences were photographed by Lucien Andriot, A.S.C., whose technical skill in lighting and camera work contributed greatly to the program's success—especially from the video viewer's point of view.

Charles DeSoto, five months in Korea filming newsworthy material for KTTV, returned to Los Angeles latter part of December after suffering a cracked rib in an accident in the war zone. DeSoto was one of first television newsworthy cameramen on the scene, and has done a remarkable job supplying KTTV with action footage of the war, which he photographed, using two 35mm. Filmas and an Auricon Cine-Voice stereo sound camera.

Engineer Rudolph, is often cinematographer Red Humphreys, for an extra one of Los Angeles Times' crack news photographers. Several months ago Humphreys was transferred to KTTV's news department, headed by Benjamin Berg. He arrived in Tokyo New Year's

LA—A little bit about Honolulu, 1933—using Japanese New Year's greetings then headed for war zone in Korea.

Only slow moving otherwise bright outlook of the television film industry is abrupt revelation last month that stems film stock will be sharply curtailed. Preparing to allocate film supplies, the National Production Authority has asked all laboratories to furnish figures on the amount of footage used by all customers during 1949-50. Very few TV film users have any considerable record of film use during this period. Some already have been notified by Eastman Kodak Company there is no recording stock available. During World War II, allocations were based on records of previous requirements.

Third Annual Awards dinner of the Academy of Television Arts and Sciences, Inc., will be held Tuesday evening, Jan. 23, at the Ambassador Hotel in Los Angeles. Entitled, "The TV Academy's equivalent of the motion picture industry's Oscars," will be awarded for best performances and accomplishments in the various fields of TV endeavor, including cinematography of video films.

An increasing number of A.S.C. directors of photography saw activity in the television field during 1950. At least 26 members of the Society contributed their talents to the new medium either in photographing or lighting television shows, or photographing TV films. These included Lucien Audner, Joseph Brice, Norbert Brodine, Floyd Cusick, Clyde DeVerna, Ray Yerxa, Henry Fosslich, Paul Ivano, Fred Jackson, Jr., Benjamin Kline, Lowell London, William Mellos, Harry Newman, William O'Connell, Gus Peterson, Robert Pirack, Gray Roe, Jackson Rose, James Van Treas, Mack Strenger, Walter Stronge, Karl Struss, Stuart Thompson, Gilbert Warrenson and Rex Wierps.

"Manus For TV," written by John H. Bateman, associate editor of *Tele-Tech Magazine* came off the press last month. Publisher is The Macmillan Company. Tote covers all phases of video film production problems, discusses the details of program planning and production, and gives specific examples of successful and unsuccessful film commercials.

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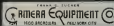
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(Continued from Page 20)

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find that many such films are available
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the airlines.

Now let us study the actual step-by-
step routine of developing style. Using
a basic example, let us say that you are
about to film a family camping trip. You
should decide in advance whether your
film story will have more audience in-
terest if you and your camera are merely
spectators or whether it will be more
entertaining if you become actual partici-
pants in the excursion.

If you are convinced that a straight-
forward approach is the best way to
handle your camping trip picture, then
it is necessary to point up the fact that
the cameraman is a member of the party.
Similarly, the angles you would adopt
would simulate the straightforward point
of view of a spectator standing more or
less apart from the action of the group,
and recording various activities as they
occur. This does not mean that you will
avoid the use of close-ups or shoot every-
thing from a spectator's distance, how-
ever, but the camera (and you as the
cameraman) will not become involved in
the pictured action itself.

On the other hand, if you decide to
enter into the spirit of the thing as a
participant, your camera will assume a
more subjective point of view. You will
show the various activities as they look
to you, usually in the big middle of it
all. For example, if there is food being
passed around, someone might offer a
filled plate to the camera, and your free
hand might come out from under the lens
to accept it. If you are lying on your
stomach or sitting in a tree to watch some
of the goings-on, your camera would cer-
tainly assume these angles. From time to
time during the course of the trip, you
might hand the camera to someone else
so that he can make shots of you in
these various attitudes to tie in with
the footage you yourself film.

This latter style of filming is less
formal than the other, and more interest-
ing for the family type of picture. All
too often, we see reel upon reel of
personal movies without ever catching a
glimpse of the cameraman, who is or
should be very much a part of the group
engaged in the activity shown. Also, this
subjective point of view can add a certain
humor and personality to the entire film.

Broadening our scope, let us see how
style can be adapted to fit the various

types of cine photography which you are
likely to want to do. In filming the family
participating in occupations and activities
which you will want to fondly review at
a later date by means of motion pictures,
it is a good idea to keep the whole thing
very personal and informal, as we have
already pointed out. In addition, how-
ever, it is nice to have the participants
look as well as possible in the resulting
film, so that later screenings will be a
source of pleasure rather than embarrass-
ment to the people pictured. With this
in mind, there are certain adaptations of
style and technique which will help you
to get a flattering result.

Coupled with proper makeup of your
female subjects, good lighting is much
to be desired. In the case of interior
sequences, good basic lighting need not
be complicated. For color, a ratio of two
to one between the key light and the fill
light will give a nicely balanced effect,
but the finishing touch will be provided
by a back light placed above and behind
the subject, slightly favoring the shadow
side of the head. Such a light not only
separates the subject from the back-
ground, but produces a modeling and a
luster to the hair that is quite flattering.

Applying similar techniques to exterior
filming, we find that the same flattering
effects can be achieved through the use
of reflectors. Close-ups of people shot
in bright sunlight are often unflattering
because of deep shadows around the eyes
and one side of the face. Simple reflectors
constructed of crumpled silver foil af-
fixed to plywood panels will do away
with such deep shadows and provide a
nicely-modeled lighting. The highlight
effect from the back can be achieved
by placing a reflector up high behind
the subject in the same way as a back
light.

Carrying the idea even further, study
your subject to see whether he or she
will look better in profile, full face, or
from a high or low angle. Careful atten-
tion to framing and composition will
give your movies a technical style that
will lift them above the level of hap-
hazard home movies.

If you develop an interest in a par-
ticular type of motion picture subject
matter, you should strive to evolve a
style that will complement it. For ex-
ample: in filming a local news event,
your camera is definitely a spectator,
therefore avoid the subjective treatment
already described above. The reason for
this is that it is the subject and not the
cameraman that is important to the

audience, which would prefer not to be conscious either of the equipment or the individual who was doing the filming. Therefore a straightforward, uncomplicated approach that clearly and forcefully shows the details of the situation is much to be desired. Where the action portrayed is frankly realistic, avoid the use of reflections or other technical aids which, by making the photography too glossy, would detract from the force of the action. The so-called "documentary" quality, which has been applauded in photographs and featurettes and based on actual happenings, is usually nothing more than straightforward photography, filming the subject as it actually looks without benefit of mechanical gloss.

The next focal test for the amateur or semi-professional cameraman interested in developing a style is an experiment in filming a dramatic or "story" type of picture. Far from being a Hollywood production, this may be based on a simple little script written to unlike family and friends as actors. By "dramatic" we do not necessarily mean a serious theme; on the contrary, a comedy type of script may prove very entertaining from the standpoint of filming and viewing. The trick here, after a simple script has been written, is to go over each sequence carefully and decide what type of camera and lighting treatment would best do justice to the action as written.

In a light comedy sequence, for example, high key lighting which is bright and sparkling will help convey the proper mood. A serious dramatic sequence, on the other hand, will usually benefit from low key lighting with mass shadows subduing the background and that which is not the most important part of the action. If you wish the audience to feel superior to the situation or a certain character, a high camera angle will usually produce the effect. Similarly, if you wish a character to dominate the screen, place your camera at a low angle so that he will seem to loom importantly into the frame. The use of a wide-angle lens will exaggerate both of these effects.

The wide angle lens can be used in another way to add style to your dramatic film. By framing an action sequence with either an object or person tightly framed in the foreground, you create not only a more forceful composition, but also a certain dramatic relationship between the two ideas represented. For example, if you shoot a wide angle composition showing a telephone in the foreground filling half the screen, while a character paces nervously up and down in the background, the audience will immediately assume that he is anxiously expecting a phone call. Learning to tie such ideas together photographically is one of the

(Continued on next page)

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Current Assignments of A.S.C. Members



Major film productions on which members of the American Society of Cinematographers were engaged as directors of photography during the past month

Columbia

- **BERNARD GIBBY**, "Seduction," with Humphrey Bogart, Lee J. Cobb, Maria Tamm and Evelyn Maerz. Curtis Bernier, director.
- **HENRY FORD**, "My Son," with Willard Parker, Helen Walker, Elizabeth Arden, Emory Parnell and Alida Da Ray. Mickey Rooney, director.
- **PHILIP TANNEN**, "Criminal Lawyer," with Pat O'Brien, Jane Wyatt, Mike Mazurki and Mary Clyde Seymore. Fifebrum, director.
- **IRVIN CARTER**, "Magic Carpet," (Technicolor) with Lucille Ball, John Agar, Patricia Medina and George Tobias. Lou Landers, director.
- **ALLAN ROSS**, "No Help From Heaven," with Dore Clark, Coby O'Donell, Tom Drake and Roy Williams. Ralph Murphy, director.

Independent

- **JAMES WM. HONE**, "He Ran All The Way" (Robert Ford), with John Garfield, Shirley Wootell, Wallace Ford, Gladys George. John Berry, director.
- **FRANK LEROY**, "When I Grow Up" (Robert Ford), with Robert Preston, Martha Scott, Babette Driscoll, and Charles Grainger. Michael Kamen, director.
- **PAUL DUANE**, "The Bridge" with Hugo Black, Beverly Michaels, Robert Dune, Anthony Jackson. Hugo Black, producer-director.
- **LEONARD MELLIE**, "Fighting Phantoms," (Western Adventure Prod.) with Fritz Leiber, Ray Bennett, Clark Bryson and Byron King. Rex O'Connell, director.
- **MARSH LEPAGE**, "A Wonderful Life," (Premiere Film Comm. Prod.) with Arthur Shields, Andrew Tomba, John Hamilton and Dorothy Fagan. William Rosenthal, director.

M-G-M

- **VINCE GUER**, "Kismet My Dear" (Technicolor) with Red Skelton, Sally Forrest, MacDonald Carey, William Devaney and Mollie Lewis.
- **ROBERT FLAHERTY**, "Rock, Young And Pretty" (Technicolor), with Jane Powell, Vic Darnley, Wendell Corey, Dorelle Dornova and Gus Merkl. Norman Taurog, director.
- **CHARLES ROSS**, "Showboat" (Technicolor), with Kathryn Grayson, Ava Gardner, Howard Keel, Joe E. Brown, Agnes Moorhead. George Sidney, director.
- **JOHN RUTHERFORD**, "Kind Lady," with Ethel Stender, Marilee Bracy, Angela Lansbury, Kenneth Wynne, Donis Lloyd and Betty Blair. John Hughes, director.
- **GEORGE POLYAK**, "People In Love," with Ray Milland, John Hodiak, Nancy Davis, Jean Hagen, Lewis Stone and Gordon Gerns. Fletcher Markle, director.
- **HAROLD ROSEN**, "Love Is Better Than Ever" with Elizabeth Taylor, Larry Parks, Josephine Haden and Tom Tully. Stanley Donen, director.
- **HAROLD LINTON**, "No Question Asked," with Barry Sullivan, Arthur Dahl, George

Murphy, Jean Hagen, Richard Anderson and Dick Simmons. H. P. Kern, director.

Monogram

- **WILLIAM SCHAMBER**, "Rhythm 101," (Lloyd's Famous Prod.) with Jane Frazee, Kirby Grant and Lew Collier. Paul Landers, director.

Paramount

- **CHARLES LANE**, "Quintette's Raiders" (Hal Wallis Prod.), with Allen Ladd, Wendell Corey, Arthur Kennedy. William Wendell, director.
- **DAVID FAY**, "Brotherhood," with Jack Fontaine, John Lund, Mona Freeman and Peter Hansen. Mitchell Leisen, director.
- **RAY BENNETT**, "Fort Savage" (Formerly called "Devil's Canyon" (Nat. Nat. Prod.), with Kerling Hayden, Barbara Rush, Forrest Tucker, Arthur Warkye, Richard Arlen, Victor Jory, Edgar Buchanan, Carl Thibault. Ray Knight, director.
- **GEORGE BARKER**, "Here Comes The Groom," with Bing Crosby, Jane Wyman, Franchot Tone, Robert Keith and Jacki Gressel. Frank Capra, producer-director.
- **LEE GARDIN**, "That's My Boy" (Hal Wallis Prod.) with Dean Jagger, Jerry Lewis, Ruth Hussey, Eddie Mayhoffer and Polly Bergen. Hal Wallis, director.
- **JOHN SAITH**, "When Worlds Collide," (Technicolor) with Richard Dix, Peter Haines and Larry Keating. Rudolph Masi, director.

R.K.O.

- **KARL STROHM**, "Fanny's Port" (Sol Lesser Prod.), with Lex Barker, Virginia Huston, George Macready. Glenn Anders and Douglas Fowley. Rynia Rustia, director.
- **RONALD BARLAN**, "The Thing" (Wendell Film Prod.), with Kenneth Tobey, Margaret Sheridan, James Young. Christine Nyby, director.
- **EDWARD CRISTIANINI**, "Two Tickets To Broadway" (Technicolor), with Janet Leigh, Tony Martin, and Smith & Dale. James V. Kern, director.
- **WILLIAM BYRNER**, "Flying Leatherstocking" (Technicolor), with John Wayne, Robert Ryan, Don Taylor, Jay C. Flippen. Nicholas Ray, director.

20th Century Fox

- **LEON SCHAMBER**, "On The Riviera" (Tech. center) with Danny Kaye, Gene Tierney, Catherine Calvert, Marcel Dalio, and Ann Code. Walter Lang, director.
- **FRANK FLAHERTY**, "Legends Of The Dunes" (Shooting In Germany), with Gary Merrill, Richard Widmark and Oscar Werner. Arnold Kravt, director.
- **JOE MACDONALD**, "U.S.S. Teahmeh," with Gert Friderichs, Eddie Albert, Jane Greer, and Milford Mitchell. Henry Hathaway, director.
- **CHARLES G. CLARKE**, "Kangaroo" (Technicolor) (Shooting In Australia), with Messenia O'Hara, Peter Lawford, Finlay Currie and Richard Boone. Lewis Milestone, director.
- **LEON SCHAMBER**, "David And Bathsheba"

(Technicolor), with Gregory Peck and Bona Hayward. Henry King, director.

- **JOHN LUTHER**, "The Guy Who Sank The Navy," with Paul Douglas, Joan Bennett, Linda Darnell, Don DeFore and Zero Mostel. Joseph Newaz, director.
- **JOE MACDONALD**, "Will You Love Me In December" with Monty Woolley, Jean Peters. Constantine Costa, Marilyn Monroe and David Wayne. Harmon Jones, director.
- **NORMAN BASKIN**, "The Frog Men," with Richard Widmark, Dana Andrews, Gary Merrill, Jeffrey Hunter, Robert Wagner and Warren Stevens. Lloyd Bacon, director.

Universal-International

- **CLAYTON KRAV**, "Air Cade," with Stephen McNally, Carl Russell, Richard Long, Alex Nicol, Charles Drake, James Best, Rock Hudson, and Russell Dumas. Joseph Pevney, director.
- **CHARLES BOYLE**, "Don Ensigne" (Technicolor), with Ricardo Montalban, Cyd Charisse, Andrea King, Gilbert Roland, J. Carroll Nash, George Tobias, Antonio Moreno and Bradigan Carr. Hugo Fregonese, director.
- **WILLIAM DUNBAR**, "Bonanza," with Claudia Cullers, Ann Holt, Robert Douglas, Anne Crawford Douglas. Jeff, director.
- **RENNIE MITCHELL**, "Little Tyke" (Technicolor), with Mark Stevens, Rhonda Fleming, Nancy Guild, Charles Drake, Jerome Cowan, Leonid Kereless, Marie Wilson. Frederick de Cordova, director.
- **IRVING CLARKE**, "Fanny Goes To The Fairs," with Donald O'Connor, Faye Grant, Jean White and Carol Kellaway. Arthur Lubin, director.
- **MALCOLM GARTMAN**, "Castle Drive" (Technicolor), with Joel McCrea, Dean Jagger, Chail Wills. Kurt Neumann, director.
- **EARL GUTHRIE**, "Hollywood Story," with Richard Conte, John Agar, Henry Hall and Stanley Rogers. William C. Dietz, director.

Warner Brothers

- **ROBERT BARKER**, "Brenners On A Train," with Robert Walker, Ruth Roman, Farley Granger, and Pat Blackwell. Alfred Hitchcock, director.
- **RONALD DUFFAN**, "The Story Of Fanny," with David Brian, Steve Cochran, Dick Winters, Ted de Corsia. Crane Wilbur, director.
- **SAM HICMAN**, "Fort Worth," with Randolph Scott, David Brian, Phyllis Thaxter, Helmut Dorn, and Henry Hall. Edwin E. Marks, director.

DEVELOPING "STYLE" IN CINE PHOTOGRAPHY

(Continued from Page 32)

elements which will give your photography professional style.

One of the most valuable devices used in professional filming is the moving camera shot, in which the camera approaches or withdraws from the subject as the action demands. While in Hollywood this is accomplished by means of elaborate camera cranes, booms, and dollies, it is possible for the amateur cinematographer to improve simple methods of achieving a similar effect. Wagons, loading carts, and automobiles smoothly pushed by willing hands, can help the amateur cinematographer to achieve a fluid

effect. Thus he can move in to a close-up or pull away to a long shot as the action develops, combining in one "take" several angles which otherwise would have to be achieved through a series of individual shots cut together.

Study the techniques of professional cameramen as shown in the professional films at your theater, then apply and adapt these techniques in your cinematography. Starting with this intensive approach, you will find that more and more you will be improving and adding techniques of your own, until at last you will have developed a style which is not only uniquely your own but also effective from the audience's point of view.

SOUTH AMERICAN FILM LABORATORY

(Continued from Page 35)

two 35mm sound developers, two 35mm picture negative developers, and one 35mm-stem color Monopack developer. For 16mm, there is one positive and two picture negative developers. All of this equipment was designed and built by the laboratory's engineering department. The twelve developing machines give the laboratory a total daily capacity of 550,000 feet of film.

Range of equipment in the printing room is impressive. Here will be found an Bell & Howard 35mm picture negative printers, four B&H 35mm sound negative printers and one RCA. For color printing there is one Cinema Arts 35mm hi-pack color printer and one Duplex Strip Printer for 35mm Monopack color.

For stereo reduction printing there are two Depue optical reduction printers and one Shumick optical printer; and for 16mm sound reduction prints, there are one Depue and one Alex printer. For 16mm positive contact printing, there are one Depue, one Fried and one Bell & Howell continuous printers. Other equipment affords production of 35mm registration prints and 35mm dupe negatives. In all, the 24 machines in this department provide a daily capacity of 500,000 feet of film.

The seven projection rooms are equipped with both 16mm and 35mm sound projectors. In the cutting and editing rooms are twelve Moviolas for positive film and twelve for negative. Nine cameras of various makes compose the tele department photographing equipment, and in the optical department, one DeBrie "Traco" optical printer unifies the laboratory's present requirements.

A special section of the laboratory is devoted to the processing of the company's own Be-Pack color process.

"Alex-Color." Here a strip printer built by the Cinema Arts & Crafts Co., Hollywood, is used for the copying of both negatives in use operation. Color work on prints is done by a combined process of coloring and tinting in a specially constructed machine designed by the company's engineering department.

The meticulous attention given all processes by the laboratory's Control Department is facilitated by such items of equipment as Eastman processing control potentiometers, Western Electric photoell densitometers, Eastman N. C. color densitometers, Eastman "Capitol & Purdy" densitometers, Leeds & Northrup potentiometers, and two Bausch & Lomb precision microscopes.

The preparation of developing solutions in a large scale operation. For this a special room is provided which houses a battery of fifteen developer circulating tanks. These have a total capacity of 4,000 gallons for positive and 5,000 gallons for negative developer. The solutions are piped directly to the developing room under pressure supplied by motor-driven pumps.

A complete chemical laboratory adjoins the Technical Office. This is equipped with three large stainless steel tanks, each having a capacity of 3,000 liters, each centrifugal "stirring unit" for the preparation of negative, positive and sound film developers. A separate room, 45 by 15 feet in size, is set apart for the storage of chemicals, and has a direct exit to a side street.

The laboratory building is constructed on a solid foundation of pylons which rise nine feet above the ground level. At no point is the structure in direct contact with the earth. Since all rooms are artificially illuminated and air-conditioned there are no outside openings to the laboratory proper, thus safeguarding the interior of the building from external light and temperature changes.

Wholly planned and designed by Serrano, Laboratories Alex, S. A. is a tremendous achievement for a man who, only seven-two years ago, took up the hobby of amateur movie making and gradually progressed in the science of motion picture production in a country that admittedly offered a very limited field of opportunity as compared to Hollywood and other large motion picture production centers. Now, Serrano and his Laboratories Alex, S. A., is destined to create greater opportunities for film production in South America, both for the producers of that continent and those of American and other countries who may find occasion to produce there. His laboratories not only have the capacity to serve such film makers, but the technically trained men to assure top quality work in all departments. END



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Film and Tape Sound Reader

Schwen Products Co., 539 East 33rd St., Los Angeles, manufacturers of motion picture and photographic equipment, announce a new combination sound reader for use with either optically or magnetically recorded sound tracks. The unit accommodates both 16mm and 35mm film, also 8mm, 16mm and 1/2 inch magnetic tape or film.

Tradesnamed the "Studio Sound Reader," it includes such features as: 115 V AC-DC (50-60 cycle) amplifier having a response from 50 to 7500 cycles; magnetic head with low hysteresis; over-modulated P.M. speaker; standard 922 photo-cell; tone controls; separate controls for exciter lamp and tape head and polished handle rollers for bypass of picture original in editing.

Roller guides are easily changed with provided Allen wrench, affording adjustment for use with above specified film and tape sizes. For 35mm sound film, a complete set of rollers and head track is provided with each machine. These may be easily installed by user.

Price is \$139.95. L.A.B. Los Angeles

Gordon Enterprises Moves

Gordon Enterprises, formerly the Coogan Company located at 1710-1720 North Cahuenga Blvd., North Hollywood, has moved to new and larger quarters at 5516 North Cahuenga Blvd. In addition, company has acquired a new warehouse at 10615 Chandler Blvd., in the same city.

Expanded facilities now permit company to offer services in overhauling and servicing of motion picture equipment. New building features a large machine shop with latest precision tools and an air-conditioned instrument repair shop. A new and enlarged parts department

enables company to render more efficient and expeditious service.

Among Gordon Enterprises' inventory of new and re-conditioned motion picture equipment in their warehouses are 16mm and 35mm motion picture cameras, Mitchell and Bell & Howell-mounted lenses, 16mm and 35mm projection equipment, reels, cuts and cobs, screens, animation stands, tripods, automatic 16mm and 35mm film projection machines and drivers, editing and cutting equipment, continuous and step printers, studio lights, Movolas, and Mitchell camera equipment of all types.

Booklet On Editing

"Tips On Editing And Tinting" is title of new booklet just issued by Bell & Howell Company, Chicago, and available to amateur movie makers at camera stores and Bell & Howell equipment dealers. Step-by-step instructions show the amateur how to make and photograph titles, how to edit his films to make interesting continuities. Price of booklet is five cents.

Finder Glasses

Following initial announcement last month of their new TV Alignment Ground Glass for viewfinders of 35mm cameras used in production of motion pictures for television, Greiner Glass Industries Co., 781 East 143rd St., New York, announce three new ground glasses for 35mm Mitchell cameras: (1) Standard ground glass suited for a camera aperture of .868" x .631", projection aperture, 16mm reduction (cut off) line, horizontal and vertical center lines and sound center line whenever desired; (2) special camera effects ground glass suited for same camera and projection aperture, across grid-pattern dividing and sub-dividing the field in equal squares, and horizontal and vertical center lines indicated; (3) animation ground glass suited for silent (full) aperture (.920" x .720"), camera aperture, home receiver picture area aperture, horizontal and vertical center lines, and sound center line.

Finder ground glasses are available for other makes of 35mm motion picture cameras including Bell & Howell, B&H Eyma, and Wail.

(Continued on Page 36)

Classified Ads

(Continued from Page 31)

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WHAT'S NEW

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Leica Lens Adapter

The entire assortment of Leica camera lenses, which couple to the Leica range-finder, may now be adapted for use on the Cine Kodak Special I camera, using the new Triplus Adapter.

Adapter permits use of the regular reflex finder of the Cine Special camera for focusing, as well as the Triplus Adapter's eye-level finder. This is marked for 50mm, 50mm, and 135mm, Leica lenses. Other size marks are also available on special order.

The Triplus adapter is custom-made and fully guaranteed. Leica lenses screw directly into the Adapter which in turn is securely locked in place on the lens turret of the Cine Special. Except for the larger Leica telephoto lenses, the Triplus Adapter permits use of all Leica lenses, Leica Microscope Adapter and Leica Extension Tubes on the Cine Special I.

Priced at \$46.50, the Triplus Adapter is available from the Triplus Company, 43-E Garden Drive, Roselle, New Jersey.

East Coast Equipment Center

Arrang for greatly expanded activities during 1951 in the business of buying, selling and trading 16mm and 35mm motion picture equipment is the firm of **Florman & Blubb**, 723 Seventh Ave., New York City, right in the heart of New York's film production center. Both Blubb and Florman are professional cameramen, know production problems and equipment from A to Z.

Reflex-Image Magnifier

Owners of Cine Kodak Special cameras will be interested in announcement of a new reflex-image magnifier by Pictorial Enterprises, 258 Clara St., San Francisco, Calif. Available for either the model I or model II Cine Special with 200 ft. film magazines, magnifier features a very sharp field, 7X-4X magnification of full ground glass field and

a 13X-14X power on approximately 25% of center area for highly critical focusing.

Instrument attaches to camera with a single mounting screw at top-center of film magazine, and swivels away when top-of-magnifier viewfinder is to be used. It involves no interference with side mounted finders or magazine exchanges. List price is \$75.00.

Film Protection Service

Rapid Film Technique Inc., 21 West 46th St., New York City, announces increased facilities for offering to the motion picture industry its film restoration and lacquering service. This consists of removing used 35mm and 16mm negatives and originals, prints and duplicates, color and black and white; and the lacquering of the emulsion side of new 35mm and 16mm prints.

The restoration process is said to remove scratches and abrasions on both sides of the film, restoring its flexibility. A coating of lacquer applied to emulsion side of film protects against recurrence of scratches. In the lacquer process, a thin, transparent film of lacquer is applied to emulsion side to give protection to new films.

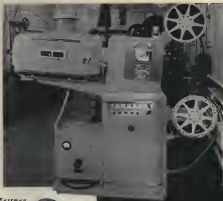
The company offers to service a sample roll of film to demonstrate effectiveness and economy of its processes.

DO NOT TALK TOO MUCH!

(Continued from Page 27)

tragedy from the ledge behind Thorne's Face, England. But this aggression would have got me nowhere. So I left well enough alone and shut up. Instead of my voice, there's a scratch of light-beamed image to match the sparkling gawdy of the scene.

In supplying information, picture and commentary should go hand in hand. Remember the use of commentary for continuity links. A sentence will often save a great deal of footage. Commentary can, for instance, be used to indicate a time lapse. No need to invent variations on the theme of the spinning clock hands, or the growing lump of cigarette ends in an ash tray. Even a fade may be unnecessary. A word or two will do the trick. The sound record can assist transitions of all kinds, but beware of taking too much advantage of this, or your film may jerk like a grasshopper with St. Vitus dance. Develop a happy medium and a more professional result will follow.



Left, the Eastman 16mm Projector, Model 25, brings 16mm projection to the professional level. Shown here, adapted for arc illumination, permanently installed alongside 35mm. equipment.

Below, working parts of the film movement mechanism are in constant view of the operator - readily accessible for threading and cleaning.



The Eastman 16mm. Projector, Model 25, adapted for 1,000-watt tungsten light



The Kodak Projection Ektar Lens, in a choice of four focal lengths, insures superior screen image



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